Please amend the paragraph beginning on Page 10, Line 18 and spanning Page 11 as follows:

Figure 1 is a block diagram of a desiccant dehumidification system (DDS) 100 according to one embodiment of the present invention. DDS 100 includes a housing 96 partitioned into two separate chambers, a first air chamber 98 and a second air chamber 99, by partition 116. This ensures that the air in each partition are relatively separate during processing. Desiccant wheel 101 is rotated so that its surfaces 117 and 118 are exposed to the air in one or the other of the partitions determined by partition 116. Desiccant wheel 101 is a porous structure and is ~~coated with~~ has contained therein a desiccant material that absorbs water from air passing over it.

Please amend the paragraph beginning on Page 12, Line 23 and spanning Page 13 as follows:

Return air cooler 201 has a chamber 203 and a chamber 205 separated by ~~an evaporative cooler~~ a cooling heat exchanger 204. Fan 206 is coupled to air delivery duct 207 and pulls air from the return air 220 and pressurizes it and delivers it to air delivery duct 207 as pressurized return air 221. DDS 202 is coupled to air delivery duct 207 with duct 28 and duct 213. A portion of pressurized return air 221 is channeled through duct 208 as the input air 22 to DDS 202. DDS 202 operates the same as DDS 202 described relive to Figure 1. Desiccant wheel 210

rotates between the partitions of DDS 202 determined by partition 227. The upper partition is further divided by desiccant wheel 210 into chambers 209 and 211. Fan 212 pulls input air 222 into chamber 209 across desiccant wheel 210 that removes moisture and raises the temperature of output air 223. Output air 223 is delivered back to air delivery duct 207 where it is mixed with air 224 to form processed air 214 for the living space 230.

Please amend the paragraph beginning on Page 13, Line 18 spanning Page 14 as follows:

Return air conditioner 201 takes return air 220 which is warm with a certain relative humidity and delivers pressurized return air 221 which is cooler with a higher relative humidity. DDS 202 then dries a portion of pressurized return air 221 (input air 222) and delivers it as output air 223 which is ~~hot~~ warm dry air. The remaining air 224 (cool and ~~humid~~ with high relative humidity) is mixed with output air 223 (hot and ~~dry~~ warm) to deliver processed air 214 which is warmer and dry and is within a desired comfort zone. A controller (not shown) receives the temperature and relative humidity of processed air 214, return air 220, and output air 223 to adjust parameters of DACS 200 (e.g., fan 212 speed, heater 216 temperature, fan 229 speed, fan 206 speed, etc.) to control the temperature and humidity for the processed air 214. Processed air 214 is delivered at a comfort

level using less energy than is possible with a standard air condition system.

Please amend the paragraph beginning on Page 14, Line 20, spanning Page 15 as follows:

Air mixing chamber 302 allows a measured portion of outside fresh air 314 to be mixed with the return air 315 to control the air exchange rate for the living space 330. Fan 308 pulls mixed air 316 through desiccant wheel 304 which extracts moisture delivering input air 317 which is hotter and dryer than mixed air 316. Exhaust fan 312 pulls source air 319 into chamber 310 where it is heated with air heater system 309 delivering output air 320 which is hot and ~~dry~~ of low relative humidity. Output air 320 is pulled through desiccant wheel 304 where it extracts moisture from the desiccant and exits into chamber 311. The air in chamber 311 is removed by fan 312 as exhaust air 320. Exhaust air 321 is cooler and more humid than output air 320.

Please amend the paragraph beginning on Page 15, Line 7 of the specification as follows:

Mixed air 316 undergoes a desiccant drying cycle which removes energy from the air and delivers output air 317 which is hotter and dryer. Output air 317 is then pulled through ~~evaporative cooler~~ cooling heat exchanger 306 which simply cools out air 317 and delivers it to chamber 307. The air from chamber 307 is then delivered to living space 330 as processed air 318.

The cooling of output air 317 decreases the temperature of the air and increases its relive humidity. The air processing cycle achieved with HDACS 300 uses less energy than conventional air conditioning systems and results in a system having no or low condensation. Air heater system 309 may operate the same as air heater system 119 as described relative to Figure 1. If air system 309 uses a burner like burner 108, then air feedback could be coupled from fan 308 and 312 with corresponding air lines (e.g. like 113 and 112 respectively).